

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 5 1 (original): A system for actively updating a cryptography module in a security gateway, the security gateway connected between a user computer system and a network system, the system comprising:
- 10 a Web GUI for generating at least one window in the user computer system, the window having a decryption/encryption module update system to allow a user to upload a new decryption/encryption module to the security gateway by the Web GUI;
- 15 an extended library for accommodating a decryption/encryption module; and
- 20 a module update unit for actively updating a corresponding decryption/encryption module in the extended library according to the new decryption/encryption module uploaded to the security gateway or adding the uploaded decryption/encryption module into the extended library.
- 25 2 (original): The system of claim 1 wherein the security gateway is a VPN gateway complying with an IPSEC protocol.
- 30 3 (original): The system of claim 1 wherein the security gateway includes a current library, a kernel, and a daemon, the module update unit being located in the current library.
- 4 (original): The system of claim 1 wherein the decryption/encryption module update system in the window of the Web GUI includes a system for allowing the user to update a current decryption/encryption module

in the security gateway.

- 5 (original): The system of claim 4 wherein the decryption/encryption module update system in the window of the Web GUI further includes a
5 defined decryption/encryption module system for allowing the user to add a defined decryption/encryption module into the security gateway.
- 6 (original): The system of claim 5 further comprising a defined module unit connected to the defined decryption/encryption module system for
10 generating a window for providing the user with an instruction to fill in a field in the window with a description of the defined decryption/encryption module.
- 7 (original): The system of claim 6 wherein the description of the
15 defined decryption/encryption module includes an algorithm, algorithmic identifier, data encryption block size, key length, and decryption/encryption executing function, the parameters of the decryption/encryption executing function including a data address, data block size, key information, key length, initial vector, and
20 decryption/encryption flag.
- 8 (original): The system of claim 1 wherein the module update unit selects to actively update the corresponding decryption/encryption module in the extended library or to add the uploaded
25 decryption/encryption module into the extended library according to the new decryption/encryption module.
- 9 (original): The system of claim 2 further comprising an extended library interface for assisting the extended library to communicate
30 with the current library and the kernel.

- 10 (original): The system of claim 1 further comprising a configuration
set unit such as a system file for setting an execution process
according to an IPSEC protocol wherein after a
5 decryption/encryption module is updated or added, the key exchange
process is updated according to an IKE protocol.
- 11 (original): A method for actively updating a cryptography module in
a security gateway, the security gateway connected between a user
10 computer system and a network system, the method comprising:
 downloading a new decryption/encryption module to the user
 computer system through the network system;
 starting a Web GUI of the security gateway for generating at least
 one window in the user computer system, the window having a
15 decryption/encryption module update system;
 selecting a decryption/encryption module from the window
 provided by the Web GUI;
 uploading the selected decryption/encryption module to the
 security gateway;
20 a module update unit of the security gateway actively updating a
 corresponding decryption/encryption module in the extended
 library according to the uploaded decryption/encryption
 module or adding the uploaded decryption/encryption module
 into the extended library; and
25 updating a key exchange process in the security gateway according
 to an IKE protocol.
- 12 (original): The method of claim 11 wherein the decryption/encryption
module update system in the window of the Web GUI includes a
30 system for allowing the user to update a current

decryption/encryption module in the security gateway.

13 (original): The method of claim 12 wherein the
decryption/encryption module update system in the window of the
5 Web GUI further includes a defined decryption/encryption module
system for allowing the user to add a defined decryption/encryption
module into the security gateway.

14 (original): The method of claim 13 further comprising:
10 when starting the defined decryption/encryption module, generating
a window for providing a user with an instruction to fill in a
field in the window with a description of the defined
decryption/encryption module.

15 15 (original): The method of claim 14 wherein the descriptions of the
defined decryption/encryption module includes an algorithm,
algorithmic identifier, data encryption block size, key length, and
decryption/encryption executing function, the parameters of the
decryption/encryption executing function including a data address,
20 data block size, key information, key length, initial vector, and
decryption/encryption flag.

16 (original): The method of claim 11 further comprising:
the security gateway executing the updated key exchange process.

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17 (cancelled)